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(71) Applicant
Gerald Norman Wallis
East Soley Old Farmhouse, Chilton Foliat, Hungerford,
Berkshire, RG17 0UA, United Kingdom

(72) Inventor
Gerald Norman Wallis

(74) Agent and/or Address for Service
Gerald Norman Wallis
East Soley Old Farmhouse, Chilton Foliat, Hungerford,
Berkshire, RG17 0UA, United Kingdom

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E1D DGS D2019
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S1737

(56) Documents cited
GB 2051918 A WO 83/00892 A1 US 4665665 A
US 2978074 A

(58) Field of search
UK CL (Edition K) E1D DGS DLDKN
INT CL⁵ E04B, E04H

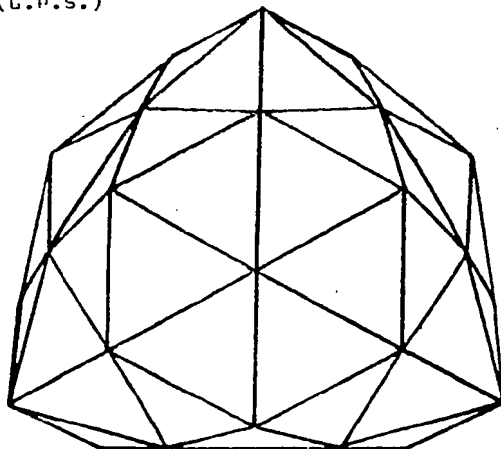
(54) General protection structure

(57) A general protection structure is comprised of equal length stress members that are arranged in equilateral triangulation so as to form pentagonal pyramids that, when joined together form the extremely strong main frame of the structure.

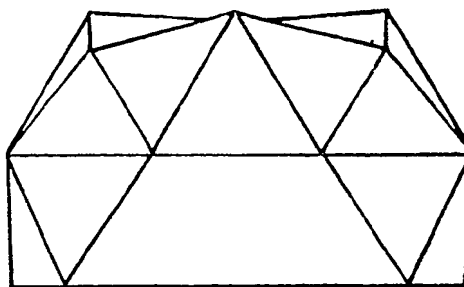
At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

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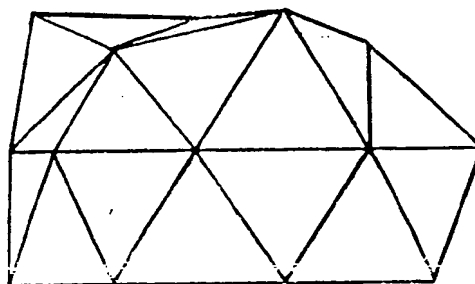
GENERAL PROTECTION STRUCTURE
(G.P.S.)



PLAN VIEW



FRONT ELEVATION



SIDE ELEVATION

(The view from other side corresponds)

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GENERAL PROTECTION STRUCTURE

This invention relates to a general protection structure

PRINCIPAL USE

The invention has a wide application in many various fields where there is a requirement for a protective structure of a temporary nature, without the need for conventional load bearing walls, pillars or support cables. Such as: Workshop, Frame tent, garage, Fruit cage, Aviary, Pool cover, Storage warehouse, Greenhouse, Hangar, Explosion building, Animal pen, Climbing frame, Building site cover, Portable entertainment building, barn, etc..

PURPOSE

A strong, lightweight, safe and rapid method of construction. The strength being in the shape and configuration.

EXISTING STRUCTURES

Existing structures require, either conventional load bearing walls, pillars or securing cables to obtain equal strength and rigidity. They also require expensive materials and labour intensive methods of construction.

FEATURES

The main feature being, the method that strength and rigidity is obtained from the shape and configuration of the structure. It is comprised of equal length stress members and connectors, to form pentagonal pyramids that, when joined into the shape and configuration as shown in the diagram, form the main frame of the structure.

FUNCTION

All loads are shared between the stress members, connectors and cladding that form the equilateral triangulation of the pentagonal pyramids that offer the strength and rigidity to the structure. The pentagonal pyramids being the main feature.

APPRAISAL

The structure is very light in weight, easily assembled and dismantled. The component parts are easily transported. There is nothing to compare with the unobstructed area/strength and volume/weight ratio. Thus offering a better margin of safety. The cladding can vary in specification to combat:- Cold, Heat, Noise, Wind, Rain, Humidity, Trespass etc.. Thus offering a cheap, strong and safe general protection structure.

CLAIMS

1 A general protection structure comprised of equal length stress members and junction connectors, to form pentagonal pyramids that, when joined in the shape and configuration as shown in the diagram, form the main frame of the structure.

2 A general protection structure as claimed in claim 1, wherein more stress members and connectors are employed to triangulate the walls between the pentagonal pyramids of the structure.

3 A general protection structure as claimed in claim 1 and 2 wherein a plyable cover is secured to the main frame to combat the elements.

4 A general protection structure as claimed in claim 1 and 2 wherein equilateral triangular insulation panels are secured in between the stress members to combat the various elements.

5 A general protection structure as claimed in claim 1,2 and either 3 or 4, wherein swing doors are provided between the pentagonal pyramids forming the walls of the structure.

6 A general protection structure as claimed in claim 1,2 and either 3 or 4, wherein, outriggers are provided to secure sliding doors between the pentagonal pyramids forming the walls of the structure.

7 A general protection structure as claimed in claim 1,2 and either 3 or 4, wherein an up-and-over door is provided between the pentagonal pyramids forming the walls of the structure.

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Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

Application number

9222831.5

Relevant Technical fields

(i) UK CI (Edition^K) E1D DG5, DLDKN

(ii) Int CI (Edition⁵) E04B, E04H

Search Examiner

J D CANTRELL

Databases (see over)

(i) UK Patent Office

(ii)

Date of Search

13 APRIL 1992

Documents considered relevant following a search in respect of claims 1-7

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2051918 A WORTH	1, 3, 4, 5
X	WO 83/00892 A1 BERGER	1, 4
X	US 4665665 WILKINSON	1, 4
X	US 2978074 SCHMIDT	1, 3

SF2(p)

HD - c:\wp51\doc99\fil000240

Category	Identity of document and relevant passages	Relevant to claim(s)

Categories of documents

X: Document indicating lack of novelty or of inventive step.

Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.

A: Document indicating technological background and/or state of the art.

P: Document published on or after the declared priority date but before the filing date of the present application.

E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.

&: Member of the same patent family, corresponding document.

Databases: The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).